

ER-3: Reduce Voice Communication

Key Risks

- System elements developed independently by stakeholders (e.g., FAA, ATN software vendors, avionics manufacturers, commercial communications service providers, and other air traffic service providers) must be interoperable.
- VDL-2 coverage of the NAS drives benefits. CPDLC communications will not be effective unless VDL-2 coverage is available across a significant portion of the NAS in order to make equipage cost-effective. If coverage is insufficient, users may not equip, controllers may not be able to utilize the capability fully, or FAA may not deploy to certain geographical areas.
- Experience is limited in the certification of cooperative air-ground systems. There is a need to acknowledge and credit the use of legacy and COTS systems and software in the end-to-end certification process.
- CPDLC represents a significant change in the human factors in the cockpit and the sector team and their interaction. This will require attention to ensure successful implementation. Increased prototyping and human-in-the-loop simulations at the early stages of the program must be designed to mitigate this risk.